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91-RF-5611

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Attn: F. R. Lockhart

RESPONSE TO COMMENTS FROM THE HAZARDOUS WASTE REMEDIAL ACTIONS PROGRAM (HAZWRAP) ON THE DRAFT PHASE I RFI/RI WORK PLAN FOR OPERABLE UNIT NO. 7 (OU 7) -JEE-0245-91

EG&G Rocky Flats, Inc. Environmental Management Department received comments on the Draft Phase I RFI/RI Work Plan for Operable Unit No. 7 (OU 7) from the Hazardous Waste Remedial Actions Program (HAZWRAP) through the Department of Energy (DOE) on July 20, 1991. HAZWRAP comments were grouped into the following four sections:

- (A) Critical Comments (Numbers 1-8);
- (B) General Comments on the Overall Work Plan (Numbers 1-17);
- (C) General Comments on the Environmental Evaluation Work Plan (Numbers 1-7); and
- (D) Specific Comments (Numbers 1-261).

Each of these four groups is discussed in the enclosure.

Should you have any questions regarding this transmittal, please contact R. T. Ogg at extension 7079 or J. T. Crone at extension 5954 of Remediation Programs.

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46469 (Rev. 3/91)

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## RESPONSE TO HAZWRAP COMMENTS

- (A) <u>Critical Comments</u> (Numbers 1-8)
- No. 1: Recent meetings with parties to the Interagency Agreement (IAG) have clarified the application of RCRA and CERCLA regulations embodied within the IAG to OU 7. The Draft Final Phase I RFI/RI Work Plan has been revised to include the recent interpretation of the regulatory framework applicable to OU 7.
- No. 2: The Phase I RFI/RI Work Plan for OU 7 has been written with consideration of the Phase I RFI/RI for the Walnut Creek Priority Drainage Operable Unit No. 6 (OU 6). The existing information regarding the operational histories of the relevant IHSS within OU 6, physical setting, hydrogeology, nature of contamination, and proposed sampling and analysis activities in the OU 6 Field Sampling Plan (FSP) were reviewed prior to designing the FSP for OU 7.

Information regarding OU 6 and the integration of the RFI/RI investigations for these two operable units are discussed in Sections 2.0, 4.0, 5.0, 7.0, and 9.0 of the Draft Final Phase I RFI/RI Work Plan. At present, the work plans for OU 6 and OU 7 are being reviewed by the same IAG participants for consistency. Continued integration of the OU 6 and OU 7 investigations will be achieved through the Project Planning Task for the RFI/RIs for these operable units.

- No. 3: Scoping of the landfill site has been performed in accordance with the broad framework created by the National Contingency Plan (NCP) and guidance provided by EPA's Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, Interim Final (U.S. EPA, 1988). Scoping of the landfill has been streamlined by focusing the RFI/RI (and CMS/FS) tasks on just the data required to evaluate the alternatives that are most practicable for assessing and remediating landfill sites. This has included (1) developing preliminary remedial objectives and alternatives based on the NCP expectations and focusing on alternatives successfully implemented at other sites, (2) identifying clear concise objectives (within the context of the IAG defined Phase I RFI/RI) in the form of field tasks to ensure sufficient data are collected to adequately characterize the site and perform the necessary risk assessments, and (3) identifying data quality objectives that result in a well-defined sampling and analysis plan, ensure the quality of the data collected and integrate the information required in the RFI/RI process. The scoping of the RFI/RI for the landfill has also been performed in accordance with guidance provided in EPA's Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites (U.S. EPA, 1991). Additional guidance has been provided by CDH and EPA members of the IAG.
- No. 4: The Draft Final Phase I RFI/RI Work Plan has been revised to discuss the decisions pertinent to the characterization of the sources of contamination within OU 7, the data gaps, data needs, and the rationale for obtaining these data.
- No. 5: The text has been revised to indicate that the IAG requires that a baseline risk assessment be performed as part of the Phase I RFI/RI. This assessment will be performed using existing information and data obtained during the Phase I RFI/RI.

Should the assessments prove inadequate, additional data may be obtained during the Phase II RFI/RI.

- No. 6: The revised OU 7 Environmental Evaluation Work Plan (EEWP) includes the same structure and format as the OU 1 and OU 5 EEWPs.
- No. 7: The OU 7 EEWP has been revised to more thoroughly address the site-specific conditions at the Present Landfill. A preliminary field survey was performed to delineate habitat types and identify vegetation community types and composition. In addition, existing data for abiotic media at OU 7 were examined in the context of regulatory standards for protection of biota, when available. When such standards were not available, human health standards were variously modified to protect (possibly) more sensitive species. Criteria for selection of contaminants of concern, reference areas, and target species are currently being developed by the members of the IAG. Preliminary criteria are described in the revised EEWP, and preliminary selections presented. These selections will be finalized when criteria are formally agreed upon. Data from initial abiotic investigations will also be used to refine contaminant lists and target species.
- No. 8: Where specified, collection method and sample programs will be designed in anticipation of using quantitative analysis methods. However, data quality may be inadequate to apply quantitative methods, be they laboratory, analytical or statistical. This can often be the case when collecting ecological data. In this case the data collected may have to be used in a qualitative sense. Such qualitative data may be sufficient to describe community composition and construct food web models. They may also be used to design sampling programs that will produce data needed to make quantitative measurements.
- (B) General Comments on the Overall Work Plan (Numbers 1-17)
- No. 1: The regulatory framework for cleanup at National Priority List sites and the application of the IAG to individual operable units at the Rocky Flats Plant is indeed cumbersome and conflicting. Recent meetings with IAG members have clarified the application of the regulations included in the IAG to OU 7. The Draft Final Phase I RFI/RI Work Plan has been revised to include the recent interpretation of the IAG as it applies to OU 7.
- No. 2: The existing information regarding contamination at the various areas/sources within OU 7 does indeed suggest that several different cleanup operations may result. However, in accordance with the IAG, these various areas have been combined into one operable unit.
- No. 3: The Draft Final Phase I RFI/RI Work Plan for OU 7 has been written with consideration of the Phase I RFI/RI investigation proposed for OU 6. Additional integration of the projects will occur during Task 1 (Project Planning) of the RFI/RI and during subsequent tasks and phases of the RFI/RI for these operable units. Characterization of contaminated groundwater will not occur during the Phase I RFI/RI for OU 7 except as it relates to delineation of leachate/groundwater within the landfill source (see also response to comment No. 9 below). Characterization of groundwater contamination will occur during Phase II.

Because the RFI/RI for OU 6 is not divided into two phases, it is not possible at this time to coordinate the field sampling and analysis activities for characterizing groundwater contamination. The identification of groundwater contaminants related to IHSSs in OU 6 is discussed in the OU 6 work plan. Information provided by the RFI/RI investigation for OU 6 will be used to scope the Phase II activities for OU 7.

- No. 4: The Draft Final Phase I RFI/RI Work Plan has been revised to present additional information pertinent to the scoping of the Phase I RFI/RI for OU 7. The sections addressing the preliminary development of alternatives, conceptual model development, and DQO development have been expanded to address and/or incorporate comments by HAZWRAP.
- No. 5: The sections pertaining to the site-specific conceptual model have been revised in response to HAZWRAP comments. Additional information has been provided regarding the identification of potential receptors at OU 7.
- No. 6: This comment by HAZWRAP reflects a lack of understanding of the DQO process as discussed in U.S. EPA's Data Quality Objectives for Remedial Response Activities Development Process (U.S. EPA, 1987). As stated on page 4-13 of this guidance document, "The number of samples which should be collected can be determined using a variety of approaches." Therefore, data needs are not necessarily statistically based. Sample locations and/or numbers for the Phase I RFI/RI were based on an evaluation of the existing information at OU 7 and the rationales for the sample locations and/or numbers are provided in the FSP (Section 7.0).

The Draft Final Phase I RFI/RI Work Plan has been edited to more clearly reflect the distinction between the Phase I and Phase II RFI/RI investigations as defined by the IAG, more specifically identify the objectives and decisions of the Phase I investigation, and more accurately define the data quality objectives (DQOs) for Phase I. This effort has included input from the members of the IAG and is considered to provide adequate scoping for the Phase I RFI/RI for OU 7.

- No. 7: Data needs required for development of remedial alternatives have been considered in the scoping of the Phase I sampling program. This information is provided in Tables 5-1 and 5-2 of the Draft Final Phase I RFI/RI Work Plan.
- No. 8: The text has been revised to indicate that the IAG requires that a baseline risk assessment be performed as part of the Phase I RFI/RI. This assessment will be performed using existing information and data obtained during the Phase I RFI/RI. Should the assessments prove inadequate, additional data may be obtained during the Phase II RFI/RI.
- No. 9: The Draft Final Phase I RFI/RI Work Plan has been revised to clarify the distinction between the Phase I and Phase II investigations. In accordance with the IAG, the objectives of the Phase I RFI/RI are to characterize the site physical features and define contaminant sources. Phase II objectives include a determination of the nature and extent of contamination and an evaluation of contaminant fate and transport pathways.

- No. 10: The text has been edited to emphasize the hydraulic connection between the surficial and bedrock units at OU 7 and the potential for fluxes of contaminants between these units. Site-specific background values generated from data obtained during the Phase I RFI/RI will be used to characterize metal contamination within the OU 7 sources, including surficial materials and underlying soils and weathered bedrock.
- No. 11: The rationale for the selection of analyte suites is based on historical information (types of contamination and waste management practices), the available chemical data regarding the presence or absence of contamination, and an interpretation of the environmental fate and transport characteristics of the individual contaminants within the physical setting of OU 7. Although this approach was approved by IAG members involved in scoping meetings for the Draft Phase I RFI/RI Work Plan, the Draft Final Phase I RFI/RI Work Plan has been modified to include a complete RCRA Appendix IX analysis for at least one (representative worst case) sample at each IHSS. Analytical data from these analyses will be utilized to verify the presence or absence of analytes and as justification for reducing the analytical suites where appropriate.
- No. 12: The methodology by which site-specific background values will be established is discussed in detail in Section 2.3.3 of the Draft Final Phase I RFI/RI Work Plan.
- No. 13: The Draft Final Phase I RFI/RI Work Plan has been edited to reflect the distinction between the Baseline Human Health Risk Assessment and the Environmental Evaluation.
- No. 14: The Draft Final Phase I RFI/RI Work Plan includes an expanded discussion of the modeling efforts to be performed as part of the exposure assessment. Release and transport of contaminants in environmental media may be modeled using basic models recommended by EPA or the best model available as determined by a model performance evaluation.
- No. 15: The Draft Final Phase I RFI/RI Work Plan has been revised in accordance with guidance provided recently in the National Contingency Plan.
- No. 16: Additional information relating to the management of investigation-derived wastes has been incorporated into Section 7.0 of the Draft Final Phase I RFI/RI Work Plan.
- No. 17: The schedule for the RFI/RI investigation and remediation of OU 7 is defined by the IAG. The Phase I RFI/RI Work Plan for OU 7 does not define this schedule.
- (C) General Comments on the Environmental Evaluation Work Plan (Numbers 1-7)
- No. 1: The structure of the environmental evaluation (EE) outlined in this work plan is consistent with the format of other EEWPs for other operable units at Rocky Flats. The structure of the EE has been adopted by EG&G and was developed through joint effort of DOE, EPA, and CDH and is still in development. Current Rocky Flats EEWPs follow this format.

The available data for OU 7 was reviewed in detail and presented in Section 2.0 of the Phase I RFI/RI Work Plan. The EEWP has been revised to include a more detailed description of the potential contamination at OU 7, but stops short of reproducing Section 2.0 in its entirety.

Limited data are available for OU 7 media. Preliminary results from abiotic sampling programs associated with this Phase I RFI/RI should be available in time for use in the EE. The phased approach presented in the EEWP provides a mechanism to make use of new data on biota (Task 3) and abiotic media in development of final sampling efforts.

DQOs have been developed to the extent practicable. Criteria for selection of contaminants of concern (COCs), target species, and reference areas are currently being discussed by the agencies involved in the IAG. Preliminary identification of COCs and the criteria used are included in the revised EEWP. The final identification of these parameters for OU 7 will be done using criteria agreed upon by the agencies.

- No. 2: The EEWP was revised to include an ecosystem approach to the environmental evaluation.
- No. 3: This point is being discussed by EG&G. Future EEWPs will have the benefit of more extensive data on the biota at RFP.
- No. 4: The biota sample location map has been revised to show coincidence of the terrestrial sampling locations with the soil sampling described in Section 7.0.
- No. 5: The EEWP has been revised to describe the reference area selection criteria and a preliminary identification of reference areas has been made.
- No. 6: The EEWP presents a plan in which the risk to ecological receptors and the ecosystem are estimated based on the levels of contaminants of concern in abiotic media and biota. These levels are then compared to values known to be toxic or damaging. Development of pathways and food webs is a site-specific process and will proceed from existing Rocky Flats data, scientific literature on toxicity of the contaminants, and data collected during the EE. The exposure assessments will be based on published models developed at the Rocky Mountain Arsenal. However, as always, the final models will be site-specific.
- No. 7: The EE will make use of Phase I RFI/RI data as it becomes available.
- (D) Specific Comments (Numbers 1-261)

The text and/or figures in the Draft Phase I RFI/RI Work Plan for Operable Unit No. 7 were modified or amended to incorporate the following specific comments: 2-7, 9-30, 32-34, 38-41, 43, 45-51, 53-55, 57-62, 64-94, 96-97, 99-100, 102, 105-107, 109-113, 117, 119, 122-125, 127-128, 130-133, 139, 141, 143-159, 162, 165-171, 173-183, 185-189, 91-203, 208-210, 212, 214, 216-219, 222, 224-230, 232-233, 236, 241-244, and 247-260.

Responses to other specific comments are provided below.

- No. 1: In accordance with the IAG, areas within OU 7 that do not have IHSS reference numbers are not included in the title for Operable Unit No. 7.
- No. 8: The RFI/RI for OU 7 has been divided into two phases in accordance with the IAG. Phase I addresses characterization of the source and Phase II addresses characterization of contaminant migration pathways. The IAG also requires that a baseline risk assessment be performed for the Phase I RFI/RI report. This assessment will be based on information obtained during the Phase I investigation and the existing information regarding potential migration pathways.
- No. 31: IAG members involved in management/remediation decisions related to OU 7 agree that the regionally important aquifer formed by the lower sandstone unit of the Laramie formation and the underlying Fox Hills Sandstone formation are not likely to be impacted by contaminants from the RFP. However, they have specifically requested that these units be discussed in the work plan.
- No. 35: The criteria used to define non-contaminated solid wastes during the late 60's and early 70's are not presently available.
- No. 36: It is not known who issued the additional guidelines in February 1973. However, it is possible that the guidance was issued by the Health Physics Operations at Rocky Flats.
- No. 37: Details regarding the permitting process are not available. Additionally, the role of the regulators in the process is not known.
- No. 42: The construction of the various structures at the landfill are considered interim response measures/actions to control the movement of leachate, groundwater, and surface water.
- No. 44: The rationale for expansion of the landfill beyond the groundwater intercept system is not discussed in any available reports or available in any other fashion.
- No. 52: See response for Specific Comment No. 42.
- No. 56: It is not presently known what drives the groundwater elevation changes in the bedrock units.
- No. 63: Because the surficial materials are hydraulically connected to the weathered bedrock and exhibit a downward vertical gradient, chemical data for both units are presented on the same map. Although this type of presentation results in a visually complex map, it does allow for consideration of the flux of contaminants between the surficial materials and the weathered bedrock. Indicator parameters were not contoured because they were not measured/available on a consisted basis to allow contouring with a reasonable degree of confidence.

- No. 95: This statement reflects guidance provided in EPA's Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites (U.S. EPA, 1991) and guidance provided by EPA and CDH through the IAG.
- No. 98: At the request of the IAG members, material in Section 2.4 is repeated in Section 4.1.3.
- No. 101: The conceptual model for OU 7, based on guidance in U.S. EPA's Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites (U.S. EPA, 1991), has been modified to include HAZWRAP comments. Additionally, the Draft Final Phase I RFI/RI Work Plan includes an expanded discussion of the completeness and useability of the existing data.
- No. 103: Again, landfill materials will be characterized in accordance with guidance provided in EPA's Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites (U.S. EPA, 1991) (see page ES-3) and guidance provided by EPA and CDH through the IAG. This guidance indicates that characterization of leachate is necessary and will be performed during the Phase I RFI/RI. However, landfill contents need not be characterized.
- No. 104: The justification for the number of sampling locations and/or numbers of samples is provided in the Field Sampling Plan (FSP) in Section 7.0. (See also response to Specific Comment No. 108).
- No. 108: Data quantity needs are not necessarily statistically based. As stated on page of U.S. EPA's Data Quality Objectives for Remedial Response Activities Development Process (U.S. EPA, 1987), "The number of samples which should be collected can be determined using a variety of approaches." Sample locations and/or numbers were based on an evaluation of the existing information at OU 7. The rationale for the sample locations and/or numbers is provided in the FSP (Section 7.0).
- No. 114: The Draft Final Phase I RFI/RI Work Plan has been edited to more clearly reflect the distinction between the Phase I and Phase II RFI/RI as defined by the IAG, more specifically identify the objectives of the Phase I RFI/RI, and more accurately define the data quality objectives (DQOs) for the Phase I RFI/RI. This effort has included input from the members of the IAG and is considered to provide adequate scoping for Phase I of the RFI/RI.
- No. 115: See response for Specific Comment No. 114.
- No. 116: The ongoing waste operations at the Present Landfill have been discussed in detail in Section 2.2.1. This section has also been edited to clarify the fact that waste disposal is presently occurring. Operational procedures at the Present Landfill are presently undergoing development and revision in response to the overall plant operations and generation of waste. One of the objectives of the Project Planning Task (Task 1) is to integrate the RFI/RI field activities with these procedures as they evolve.

- No. 118: In accordance with the IAG, the Baseline Human Health Risk Assessment and the Environmental Evaluation will be performed based on the existing information from OU 7 and the data collected for the Phase I RFI/RI. The ext has been edited to indicate that existing and new data will be used to perform these assessments. However, a Phase II RFI/RI may be required to obtain additional information.
- No. 120: See response to Specific Comments No. 104 and 108.
- No. 121: The Draft Final Phase I RFI/RI Work Plan has been edited to clarify the applicability of the QAPjP to OU 7. A Quality Assurance Addendum (QAA) for OU 7 amends the QAPjP. The QAA establishes QA controls applicable to the Phase I investigation for OU 7.
- No. 126: Remedial alternatives have been considered during the scoping of the RFI/RI for OU 7. Based on guidance provided in the National Contingency Plan and U.S. EPA (1987), likely remediation technologies have been identified for OU 7. Per guidance provided by EPA and CDH through the IAG, the appropriate level of analysis for the Phase I RFI/RI is a listing of general response actions. This is provided in Section 5.7 of the work plan.
- No. 129: Table 5-1 will be included in the final report. This table includes a list of potential remedial alternatives for OU 7. These alternatives were considered during the design of the FSP.

Based on the site-specific information presented in Section 2.0 of the Draft Final Phase I RFI/RI Work Plan, potential pathways at OU 7 can be preliminarily identified and quantified.

No. 134: Demography and land use are discussed in Section 1.3.3.6 of the Draft Final Phase I RFI/RI Work Plan. This section has been expanded to include information from the 1989 Population, Economic and Land Use Data Base for Rocky Flats Plant (DOE, in press).

The text has been edited to clarify the Phase I and Phase II activities. Phase I activities include characterization of leachate/groundwater within the OU 7 source (i.e. the Present Landfill). Information is needed regarding the concentrations of contaminants immediately upgradient of OU 7 to accurately determine the character and extent of leachate/groundwater within the landfill source.

Data collected during the Phase I RFI/RI will be combined with existing information to perform a Baseline Risk Assessment. If the results of the assessment indicate that additional characterization is required, Phase II activities will be scoped and performed.

- No. 135: The schedule presented in the work plan is consistent with the schedule presented in the IAG for RFI/RI activities at OU 7.
- No. 136: The IAG specifies that the Phase I RFI/RI for OU 7 characterize the source and soils, the Phase II RFI/RI characterize the nature and extent of contamination,

- and that a baseline risk assessment be performed for the Phase I RFI/RI report. Therefore, the baseline risk assessment will use available information and data generated during the Phase I RFI/RI.
- No. 137: At the request of IAG members, this section is repetitive. The purpose is to make this section almost a stand-alone document for use by field personnel during field activities.
- No. 138: See response to Specific Comment No. 137.
- No. 140: The rationale for the selection of analyte suites is based on historical information (types of contamination and waste management practices), the available chemical data regarding the presence or absence of contamination, and an interpretation of the environmental fate and transport characteristics of the individual contaminants within the physical setting of OU 7. Although this approach was approved by IAG members involved in scoping meetings for the Draft Phase I RFI/RI Work Plan, the Draft Final Phase I RFI/RI Work Plan has been modified to include a complete RCRA Appendix IX analysis for at least one (representative worst case) sample at each IHSS. Analytical data from these analyses will be utilized to verify the presence or absence of analytes and as justification for reducing the analytical suites where appropriate.
- No. 142: None of the paragraphs on the page specified in this comment address metal contamination in weathered bedrock at the landfill. Therefore it is not possible to respond to this comment.
- No. 160: The rationale for the analytical suites appropriate for the various samples obtained from different areas within OU 7 is based on historical information (types of contamination and waste management practices), the available chemical data, and an interpretation of the environmental fate and transport characteristics of the individual contaminants within the physical setting of OU 7. Analytical suites are discussed in Section 4.2.6 and throughout Section 7.0.
- No. 161: See response to Specific Comment No. 160.
- No. 163: See response to Specific Comment No. 160.
- No. 164: See response to Specific Comment No. 160.
- No. 172: See response to Specific Comment No. 160.
- No. 184: Although this approach may appear overly conservative, "the focus of the risk assessment for OU 7 will be to produce a realistic analysis of exposure and health risk." (Draft Phase I RFI/RI Work Plan, Section 8-1, page 8-2, paragraph 2).
- No. 190: Additional information regarding the identification of potential receptors has been provided in Section 1.3.3.6, Surrounding Land Use and Population Density. The additional information provided in this section was made available through

- U.S. DOE's 1989 Population, Economic, and Land Use Data Base for the Rocky Flats Plant, Golden, Colorado (U.S. DOE, in press).
- No. 204: The structure of the environmental evaluation (EE) outlined in this work plan is consistent with the format of other environmental evaluation work plans (EEWPs) for other operable units at Rocky Flats. The structure of the EE has been adopted by EG&G and was developed through joint effort of DOE, EPA, and CDH and is still in development. Current Rocky Flats EEWPs follow this format.
- No. 205: Given that this EE is part of a Phase I RFI/RI, there is limited information on nature and extent of contamination at OU 7. The schedule for completion of activities and dates for deliverables associated with the EE are set in the IAG. Therefore, the EE must be accomplished with the available data. As stated in the EEWP, data from the abiotic analysis programs at OU 7 will be used as it becomes available.
- No. 206: The EEWP has been revised to include the criteria for selecting contaminants of concern (COCs) in their current form. (See response to General Comment No. 1).

  As described in the revised EEWP, the criteria include the consideration of ecotoxicity of each potential contaminant.
- No. 207: See response to Specific Comment No. 205.
- No. 211: EG&G has published an assessment of the threatened or endangered species that may occur at Rocky Flats (EG&G 1991. Threatened and Endangered Species Evaluation, Rocky Flats Plant Site.) In addition, surveys are currently being conducted in conjunction with several ongoing projects at RFP.
- No. 213: Quantitative methods will be used when available, and data will be collected by methods that should satisfy the requirements and assumptions of these methods. However, if data of the quality required cannot be obtained, a qualitative assessment of the biological condition will be made.
- No. 215: The EEWP has been revised to include discussion of contaminants of concern for the EE. The abiotic sampling program has been revised to include sampling for RCRA Appendix VIII and IX chemicals on a limited scale.
- No. 220: See response to Specific Comment No. 204.
- No. 221: See response to Specific Comment No. 205.
- No. 223: The review of pertinent literature will continue throughout the EE. The EEWP has been revise to include more review of available data and regulatory standards.
- No. 231: ASTM has established standard protocols for use of the amphipod Hyallella spp. and certain chironomid species in testing sediment toxicity.
- No. 234: See response to Specific Comment No. 213.

- No. 235: Data from aquatic sample sites for Woman Creek in OU 6 will be important in the final assessment of the effects of OU 7-specific contamination. In addition, there are two IHSSs which are included under OU 6, but lie within OU 7. Sampling (especially soil) in the OU 7 RFI/RI will overlap in these areas and will probably occur before that for OU 6.
- No. 237: See response to Specific Comment No. 204.
- No. 238: See response to Specific Comment No. 204.
- No. 239: Development of the fate and transport model will follow from tissue sampling performed in Task 9. Planning for Task 9 (including development of the field sampling plan for this task) will occur in Task 8, and will follow from the contamination assessment (Tasks 4-7) and Task 3 data.
- No. 240: This approach is not a complete departure from the "quotient method", but incorporates classic modelling and data on the behavior of certain compounds in other ecosystems. This approach is taken because the exposure values for higher trophic levels often cannot be predicted from physical parameters such as the octanol/water distribution coefficient.
- No. 245: Additional ecotoxicological sampling may be required if, for example, significant population or ecosystem effects are detected in Task 3 data, or if toxicity is detected in initial toxicity testing.
- No. 246: The kinds of data resulting from the ecotoxicological data could include tissue contaminant values needed to calibrate the food web and other pathway models, or more focussed measures of ecological parameters identified as a result of contamination assessment and Task 3 results.
- No. 261: See response to Specific Comment No. 205.